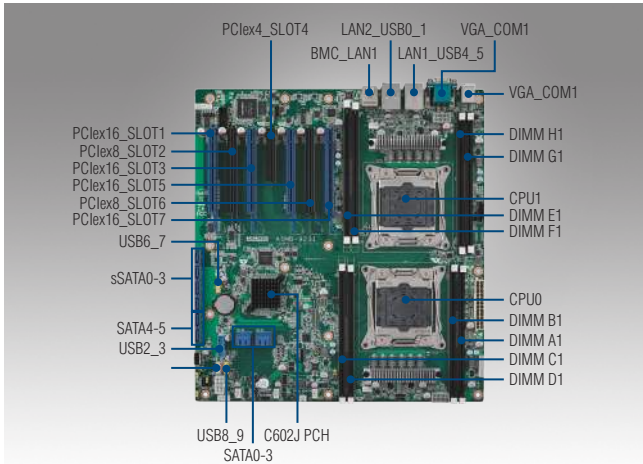


# ASMB-923

**Dual LGA 2011-R3 Intel® Xeon® E5-2600 v3/v4 EATX Server Board with 8 DDR4, 4 PCIe x16+ 2 PCIe x8, 4 USB 3.0, IPMI**



## Features

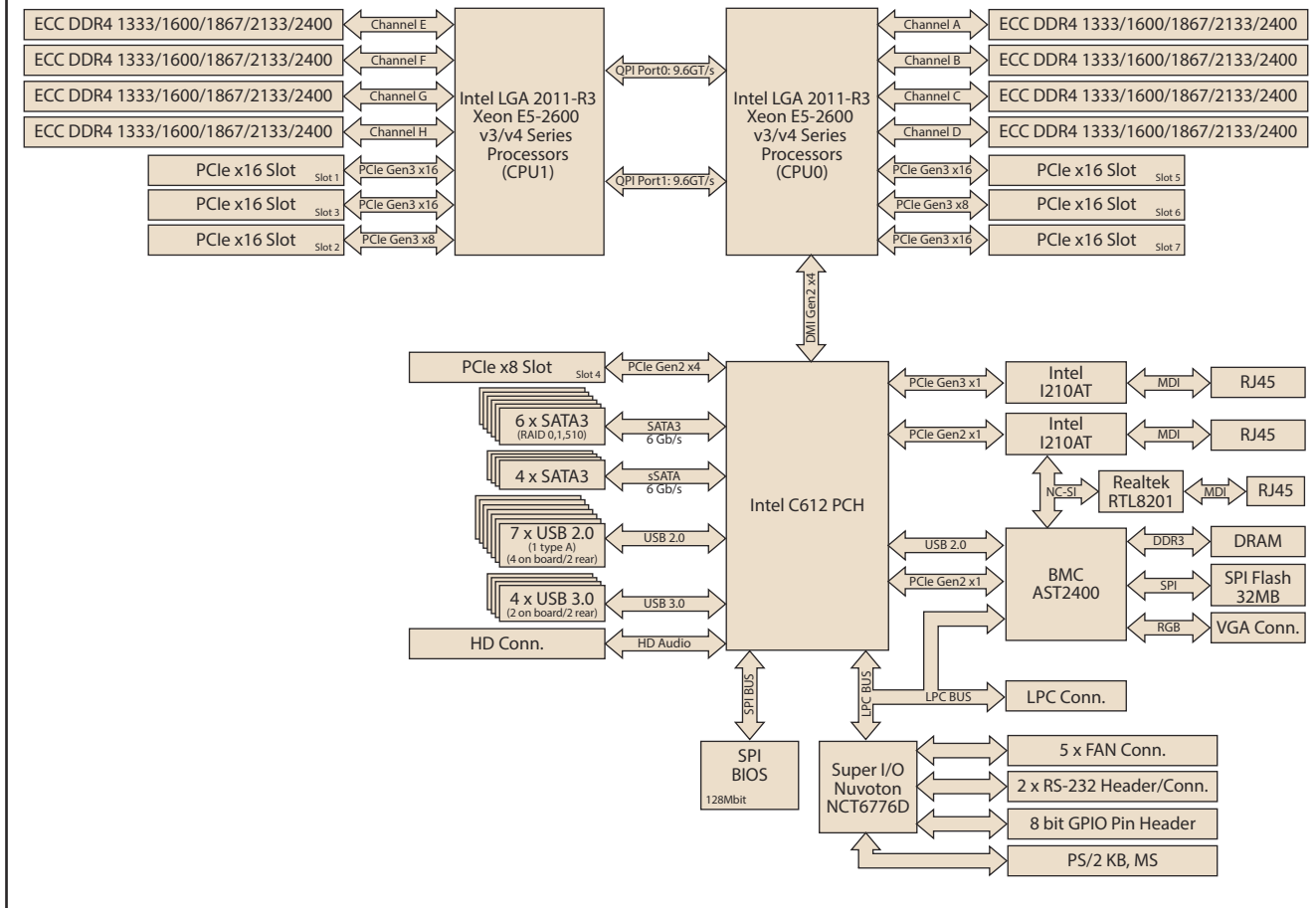
- EATX Server Board with dual Xeon® E5-2600 v3/v4 processor, 8 DIMMs 256 GB memory capacity
- DDR4 2400 MHz RDIMM up to 256 GB
- Four PCIe x16 slots (Gen3) + two PCIe x8 slots (Gen3.0) and one PCIe x4 (Gen2.0)
- 0 ~ 40 °C ambient operation temperature range



## Specifications

Form Factor		Extended ATX form factor
Processor System	Socket	Intel LGA 2011-R3
	CPU type	Intel® Xeon® E5-2600 v3/v4 dual processor (CPU cooler should be purchased separately and TDP up to 160W) Intel® Xeon® E5-1600 v3/v4 Series (1S conditional support, please contact to Advantech application engineer)
Core Logic	Chipset	Intel C612 chipset
	Total slots	8 (Quad Channel)
Memory	Capacity	Maximum 256 GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2400/2133/1866/1600/1333 MHz DIMM
	Memory size	1 GB, 2 GB, 4 GB, 8 GB, 16 GB, 32 GB
Expansion Slots	Total PCI/PCI-X/PCIe slots	7
	Slot location 1	PCIe x16 slot (x16 link), signal from CPU1
	Slot location 2	PCIe x16 slot (x8 link), signal from CPU1
	Slot location 3	PCIe x16 slot (x16 link), signal from CPU1
	Slot location 4	PCIe x8 slot (x4 link), signal from PCH
	Slot location 5	PCIe x16 slot (x16 link), signal from CPU0
	Slot location 6	PCIe x16 slot (x8 link), signal from CPU0
Graphics	VGA	Aspeed AST2400/1400 64 MB
	IDE controller	-
Storage	SATA controller	Intel C610: 10 SATA3 6 Gb/s ports Intel Rapid Storage Technology (for Windows only) (SATA0-SATA5 and sSATA0-sSATA3 Supports software RAID 0, 1, 10 & 5)
	SAS controller	-
Networking	GbE LAN	2 x Intel I210AT
Onboard I/O Connectors	Floppy connector	-
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector + 8-pin SSI 12 V power connector
	USB connector	2 (supports 4 USB port), 1* Type-A , 1* USB3.0 20pin header (supports 2*USB 3.0 port)
	Fan header	5 x 4-pin
	SMBus	1
	Chassis intruder	1
	Front LAN LED	2
	Audio Header	1
	Serial port header	1
Rear I/O Connectors	External serial port	1
	External USB port	4 (2*USB2.0 + 2*USB3.0)
	VGA port	1
	RJ-45	3 (1 port dedicated for IPMI function)
	PS/2 KB/mouse	1
	Infiniband	-
Management Solution	Software	-
	Out of band remote management	Yes (ASMB-923I sku only)
Monitoring	CPU temperature	Yes
	System Monitoring	Yes
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Power Requirement	Power On	3.3V 1.69A 5V 1.00A 12V 17.42A 5Vsb 0.05A -12V 0.01A
	Operating	Non-operating
Environment	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution
	Humidity	10% ~ 95% -40 ~ 85 °C 10% ~ 95% (Non condensing)
Physical Characteristics	Dimension (L x H)	304.8 x 330.2 mm (12" x 13")

## Block Diagram



## Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI	VGA Chip
ASMB-923-00A1E	C612	DDR4 RDIMM	2	-	AST 1400
ASMB-923I-00A1E	C612	DDR4 RDIMM	2	Yes	AST 2400

## Packing List

Part Number	Description	Quantity
2066923I01	Driver CD	x 1
2006923I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1700019748	CPU power cable(8P)	x 2
1960052312T010	I/O shield	x 1

## Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960057226N001	LGA-2011 square CPU heatsink for 1U chassis (95W)
1960055362N001	LGA-2011 square CPU cooler for 2U/4U chassis (145W)
1960065684N011	LGA-2011 square CPU cooler for 4U chassis (160W)
1700028025-01	Dual port USB cable (45 cm) with bracket
1700028042-01	Four port USB cable (45 cm) with bracket
1701090401	COM port cable with bracket
1920000406T000	1U chassis IO shield
968EMLSAP2	SUSIAccess Pro 3.0

## I/O View



ASMB-923-00A1E



ASMB-923I-00A1E